

Abstract:

A breath actuated dry powder inhaler, comprising a substantially disc shaped air circulation chamber for de-agglomeration of entrained powdered medicament using the energy of the inspiratory air stream. The chamber has a substantially circular or polygonal sidewall extending about a central axis between top and bottom walls of the chamber so that the height of the chamber is smaller than its diameter. A plurality of air supply channels disposed about the circumference of the chamber, which channels extend from joint or separate air inlets and which channels enter the chamber substantially tangentially to its sidewall. At least one of the supply channels extends through a powder dose supply region of the inhaler. The chamber further comprises an air outlet axially extending from a discharge opening in the centre of the top or bottom wall of the chamber and connects to a discharge channel that extends to a mouthpiece. The inhaler comprises at least one further air circulation chamber for de-agglomeration of entrained powdered medicament, the chambers being connected to the mouthpiece in parallel.